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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/656,522

09/07/2000

George Gerpheide

0672.CIRQ.NP

9011

26986

7590

12/01/2004

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,522

Applicant(s)

GERPHEIDE ET AL.

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is responsive for amendment filed on 7/30/2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8, 9, 12-17, 22, 23, 26-31, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348) in view of Gerpheide (Patent No.: US 6,473,069) and further in view of Godfrey et al. (Patent No.: US 5,433,610).

Regarding claims 8, 22 and 36, referring to Figs. 1-3 and 11, Hirose teaches a touchpad keyboard (i.e., character inputting area 5) for entering data into a handheld and portable electronic appliance (col. 1, lines 1, col. 33-56 and col. 4, line 59 to col. 5, line 17), said touchpad keyboard (5) comprising: a touchpad including circuitry for detecting and localizing a pointing object on a surface thereof (col. 8, lines 33-37); a housing (3) that surrounds all of the circuitry of the touchpad, while leaving a surface thereof exposed; an overlay disposed on the surface of the touchpad keyboard that defines a plurality of keys (col. 8, lines 54-61); a communications port for direct coupling to the hand-held portable electronic appliance (15) that enables transmission thereto of signals corresponding to the plurality of keys touched on the touchpad keyboard (5) (Figs. 6 and 11); and an audible feedback system that causes audible whenever any key of the plurality of keys is touched on the touchpad keyboard (col. 1, lines 51-54).

Hirose differs from claims 8, 22 and 36 in that he does not specifically teach visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched and an audio feedback system that causes a pre-recorded sound. However, Gerpheide teaches visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched (col. 5, lines 35-40 and col. 9, lines 10-12) and Godfrey teaches audible feedback system that causes a pre-recorded sound (Fig. 1, col. 1, line 47 to col. 2, line 43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the visual feedback as taught by Gerpheide and the audio feedback system that causes a pre-recorded sound as taught by Godfrey in the system of Hirose in order to provide user a more convenient services.

Regarding claims 9 and 23, the combination of Hirose, Gerpheide, and Godfrey teaches the pre-recorded sound of the audio feedback system includes a pre-recorded voice that states a name of an associated key of the plurality of keys that has been touched (col. 1, line 47 to col. 2, line 43 of Godfrey).

Regarding claims 12 and 26, Hirose further teaches a communications cable (14) that is coupled to the communications port to thereby enable remote coupling to a portable electronic appliance (Fig. 11).

Regarding claims 13 and 27, Hirose further teaches the hand-held and portable electronic appliance is portable computers (col. 3, lines 34-36).

Regarding claims 14 and 28, Hirose further teaches the communications port is wire (Fig. 11).

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Regarding claims 15 and 29, the combination of Hirose, Gerpheide, and Godfrey teaches touchpad keyboard in includes an overlay further comprises tactile feedback (col. 5, lines 63-67 of Gerpheide).

Regarding claims 16 and 30, the combination of Hirose, Gerpheide, and Godfrey a plurality of raised ridges, wherein the plurality of raised ridges (70) define a plurality of zones, wherein the plurality of zones corresponds to the plurality of keys of the touchpad keyboard (col. 7, line 56 to col. 8, line 25).

Regarding claims 17 and 31, Hirose further teaches the touchpad (5) is capacitance-sensitive, electrostatic, finger or stylus responsive devices (8, col. 8, lines 33-37).

4. Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Gerpheide (Patent No.: US 6,473,069) in view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Kikinis et al. (Patent No.: US 5,835,732).

Regarding claims 10 and 24, the combination of Hirose, Gerpheide, and Godfrey differs from claims 10 and 24 in that it does not specifically teach a mechanical scrolling wheel disposed in a side of touchpad, such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down. However, referring to Fig. 4, Kikinis teaches a mechanical scrolling wheel (18) disposed in a side of touchpad keyboard (74), such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down in order to provide a touchpad of requiring minimal amount of force to be activated (col. 7, lines 39-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the scroll wheel as taught by Kikinis in the system of the

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combination of Hirose, Gerpheide, and Godfrey in order to allow interacting with the device rapidly and conveniently.

5. Claims 11, 25, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Gerpheide (Patent No.: US 6,473,069) in view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Kono (Patent No.: US 5,914,707).

Regarding claims 11 and 25, the combination of Hirose, Gerpheide, and Godfrey differs from claims 11 and 25 in that it does not specifically teach an enrolling zone disposed in the housing, such that a user slides a pointing object along the touchpad scrolling zone to thereby cause data on a display screen to, scroll up or down, corresponding to a direction of movement of the pointing object. However, referring to Fig. 1, Kono teaches an enrolling zone (3A, 3B) disposed in the housing (3), such that a user slides a pointing object along the touchpad scrolling zone to thereby cause data on a display screen to scroll up or down, corresponding to a direction of movement of the pointing object (col. 5, line 61 to col. 6, line 18). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the enrolling zone as taught by Kono in the system of the combination of Hirose, Gerpheide, and Godfrey in order to provide a touchpad of requiring minimal amount of force to be activated.

Regarding claim 37, the combination of Hirose, Gerpheide, Godfrey, and Kono teaches a microphone for recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network (col. 6, lines 19-40 of Kono).

6. Claims 18, 19, 21, 32, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Gerpheide (Patent No.: US 6,473,069) in

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view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Grant et al. (U.S. Patent No. 6,618,039).

Regarding claims 18, 21, 32, and 35, the combination of Hirose, Gerpheide, and Godfrey differs from claims 18, 21, 32, and 35 in that it does not specifically teach a first dedicated key that facilitates navigation in web pages. However, referring to Fig. 5, Grant teaches a first dedicated key that facilitates navigation in web pages (col. 4, lines 50-65 and col. 5, lines 26-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the first dedicated key that facilitates navigation in web pages as taught by Grant in the system of the combination of Hirose, Gerpheide, and Godfrey in order to allow quickly and conveniently access to the web pages.

Regarding claims 19 and 33, the combination of Hirose, Gerpheide, Godfrey, and Grant teaches at least a second dedicated key that is programmable to actuate a computer program (col. 4, lines 50-65 and col. 5, lines 26-67 of Grant).

7. Claims 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose (Patent No. US 5,170,348), Gerpheide (Patent No.: US 6,473,069) in view of Godfrey et al. (Patent No.: US 5,433,610) and further in view of Ure (U.S. Patent No. 6,107,997).

Regarding claims 20 and 34, the combination of Hirose, Gerpheide, and Godfrey differs from claims 20 and 34 in that it does not specifically teach a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device. However, referring to Fig. 9, Ure teaches a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device (col. 2, lines 8-19, col. 7, lines 49-55). Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to incorporate the mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device as taught by Ure in the system of the combination of Hirose, Gerpheide, and Godfrey in order to allow input text and control the cursor quickly and easily.

8. Applicant's arguments with respect to claims 8-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone Number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC. 20231

Or faxed to: 703-872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or Proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

JNguyen
1/7/2004


REGINA LIANG
PRIMARY EXAMINER